

Notice of Allowability	Application No.	Applicant(s)
	10/690,617 Examiner	WEI ET AL. Art Unit
	Maryam Monshipouri	1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to _____.
2. The allowed claim(s) is/are 24-39.
3. The drawings filed on 23 October 2003 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date 7/28/04.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

An **Examiner's Amendment** to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Justin D. Karjala, on 7/28/2004.

Examiner's Amendment to the Claims

Cancel claims 40-41.

In claim 25, lines 4-5, delete “ (a) a nucleotide sequence that encodes a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2;”

In claim 25, line 6, delete (b)” and substitute therefor --- (a) ---.

In claim 25, line 7, after “NO:1”, insert --- and ---.

In claim 25, lines 8-9, delete “ (c) a nucleotide sequence having at least 95% sequence identity to nucleotides 173-1687 of SEQ ID NO:1: and”.

In claim 25, line 10, delete “(d)”, and substitute therefor --- (b) ---.

In claim 25, line 11, after “sequence of (a) “, delete “, (b), or (c)”.

In claim 26, lines 4-5, delete “ (a) a transcript or cDNA sequence that encodes a polypeptide comprising an amino acid sequence having at least 95% sequence identity to SEQ ID NO:2; ”.

In claim 26, line 6, delete (b)” and substitute therefor --- (a) ---.

In claim 25, line 7, after "NO:1", insert --- and ---.

In claim 26, lines 8-9, delete "(c)" a nucleotide sequence having at least 95% sequence identity to nucleotides 173-1687 of SEQ ID NO:1: and".

In claim 26, line 10, delete "(d)", and substitute therefor --- (b) ---.

In claim 26, line 11, after "sequence of (a)", delete ", (b), or (c)".

Examiner's Amendments to the Specification

In page 1, underneath the title, insert --- This application is a Divisional of U.S. Application No. 10/135,689 filed 05/01/2002, now U.S. Patent No. 6,670,162 issued 12/30/2003, which is a Divisional of U.S. Application No. 09/729,995 filed 12/06/2000 now U.S. Patent No. 6,426,206 issued 7/30/2002, which claims priority to Provisional Application No. 60/247,031 filed 11/13/2000.---.

In page 7, underneath "**DESCRIPTION OF THE FIGURE SHEETS**", delete "FIGURE 1 provides" and substitute therefor --- Figures 1A-1B provide ---.

In page 8, line 3, delete "FIGURE 2 provides" and substitute therefor --- Figures 2A-2C provide ---.

In page 8, line 7, delete "FIGURE 3 provides" and substitute therefor --- Figures 3A-3S provide ---.

The following is an **Examiner's Statement of Reasons for Allowance**:

Claims 24-39 are directed to isolated nucleic acid molecules comprising a nucleotide sequence (mRNA or cDNA) encoding a protein from the family of calcium/calmodulin protein kinases of specific amino acid sequence and molecules comprising or consisting of specifically claimed homologs of said nucleotide sequence with activities similar to said kinase, as well as nucleotide molecules comprising or

Serial Number:10/690,617
Art Unit 1652

consisting of sequences encoding specifically claimed variants of said kinase, vectors and host cells comprising all said DNA molecules and methods of expressing said DNA molecules.

Claimed molecules are free of prior art. Further the prior art does not teach or suggest preparing such specifically claimed molecules> hence said molecules are also non-obvious., Since claimed molecules are both novel and non-obvious, vectors and host cells comprising said molecules and methods of expressing said molecules are also novel and non-obvious.

Claims 24-39 are allowed.

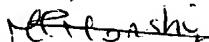
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maryam Monshipouri whose telephone number is (571) 272-0932. The examiner can normally be reached on 7:00 a.m to 4:30 p.m. except for alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnanthapu Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Serial Number:10/690,617
Art Unit 1652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Maryam Monshipouri Ph.D.

Primary Examiner
